

REPLACED BY
ART 34 AMDT

Where a container has several walls, the term "wall" can refer to any one or more of the walls. A spherical container, for example, has a single wall whereas a cube has six walls. The term is therefore generic and could refer to any part of the material defining the chamber.

The present invention will now be more particularly described, by way of example, with reference to the accompanying drawings, in which:

Fig 1 is a perspective view of a housing formed as part of a container according to a first embodiment;

Fig 2 is a section along line II - II of Fig 1,

Fig 3 shows the housing of Fig 2 with a lid component attached;

Fig 4 shows the container of Fig 3 following an initial exposure to water;

Fig 5 is a section through a container according to an alternative embodiment;

Fig.6 is a section of a container according to an alternative embodiment; and

Fig.7 is a section of a container according to an alternative embodiment.

Referring first to Figs 1 and 2 there is shown a housing 10 of generally parallelopiped shape comprising a base wall 11, side walls 12, 13 and end walls 14, 15. The housing is hollow and is open opposite the base 11 to form a tray-like structure. The housing 10 is formed from a water-soluble material. The material could be, for example, a grade of PVOH which dissolves at approximately 50°C. The interior of the housing 10 is divided into two discrete chambers 30, 31 by spaced

dissolution temperature of the container material. As the container 1 begins to dissolve the material thinned regions 20, 27 will completely dissolve before the remainder of the container. As a result, the panels 19, 26 are released from the lid 25 and the base wall 14 such that product can escape from the chamber 30. Of course the panels 19, 26 do not have to be completely released to be effective. For example the material thinned regions 20, 27 could extend part way round the panels 19, 26 such that the panels 19, 26 become flaps which hinge open. Product from the chamber cannot escape until the remainder of the container has dissolved.

Referring now to Fig 5 there is shown an alternative embodiment. In this embodiment two discrete chambers 130, 131 are formed from two separate, hollow cube-shape housings 110a, 110b which are bonded together along adjacent side walls 112a, 112b. Each housing 110a, 110b is open along one side but closed by a lid 125a, 125b, in this embodiment sealed to the housings by adhesion. The lids 125a, 125b are formed from different grades of PVOH which dissolve at different rates, with the material of the lid 125a having the faster dissolution rate. In this embodiment therefore the lid 125a of the housing 110a dissolves before the lid of housing 110b, to allow its product to escape first.

Referring to Fig.6 there is shown a container 201 with a single chamber 230. A generally cuboid housing 210 comprises a base wall 211 and side walls 214, 215. An open side of the housing 210 is closed by a lid 225.

The lid 225 is held onto the housing 210 by a clip 220 extending from its periphery. The clip 220 engages under a bead 235 formed around the open side of the housing 210.

5 The clip 220 is thinner than the remainder of the container 201. Accordingly, in use of the container the clip 220 dissolves before the remainder of the container so that the bead 235 no longer retains the lid 225, and therefore allows the lid 225 to be released from the
10 housing 210.

Referring to Fig.7 there is shown a container 301 with inner 310a and outer 310b generally cuboid housings defining inner 330 and outer 331 chambers. The outer chamber 331 contains a product which includes at least
15 some water. The inner chamber 330 contains a product which requires activation of some sort, through contact with the contents of the outer chamber 331. The outer chamber is formed so as to take longer to dissolve than the lid 325 of the inner chamber 330.

20 In use as the container begins to dissolve the lid 325 dissolves first, due to contact with the water in the outer chamber 331. This releases product from the inner chamber 330 into the outer chamber 331 before the outer housing 310b has dissolved. The product is therefore
25 activated just before the outer housing 310b has dissolved.

CLAIMS:

1. A water-soluble container (1) comprising one or more discrete chambers (30, 31) for containing product, at least part (20, 27) of the wall (11, 25) of the or at least one of the chamber/s is adapted to dissolve before the remainder of the chamber to allow product to escape.
2. A container (1) according to Claim 1, wherein the at least part (20, 27) of the wall (11, 25) is an exterior surface of the container, thereby releasing the product from the container when it dissolves.
3. A container (301) according to Claim 1, wherein the at least part of the wall (325) forms part of a chamber (330) which is carried within another chamber (331), whereby the contents of the chambers are mixed when the at least part of the wall (325) dissolves.
4. A container (1) according to any of Claims 1 to 3, wherein the at least part (20, 27) of the wall (11, 25) defines a releasable part (19, 26), such that when the at least part of the wall dissolves the releasable part is released undissolved.
5. A container (1) according to any of Claims 1 to 3, wherein the releasable part is a panel (19, 26) and the at least part of the wall at least partly surrounds the

panel, such that the panel is released when the part of the wall has dissolved.

6. A container (201) according to any preceding claim, wherein the at least part of the wall (225) comprises one or more clip elements (220) adapted to retain the releasable part (225) until dissolved.

7. A container (1) according to any preceding claim, wherein the at least part (20, 27) of the wall is thinner than the remainder of the container.

8. A container (1) according to Claim 7, wherein the material thinning (20, 27) is arranged on the interior surface of the chamber wall.

9. A container (1) according to any preceding claim, wherein the container is formed by injection moulding.

10. A container (1) according to any preceding claim, wherein at least part of the material from which the container is formed is a polyvinyl alcohol.

11. A container (1) according to any preceding claim, wherein at least part of the material from which the container is formed is a polylactic acid.

12. A container (1) according to any proceeding claim, wherein at least part of the material from which the container is formed is starch-based.

13. A container (1) according to any preceding claim, wherein the whole of the container is formed from the same material.

14. A container (1) according to any preceding claim, wherein the container is flexible.

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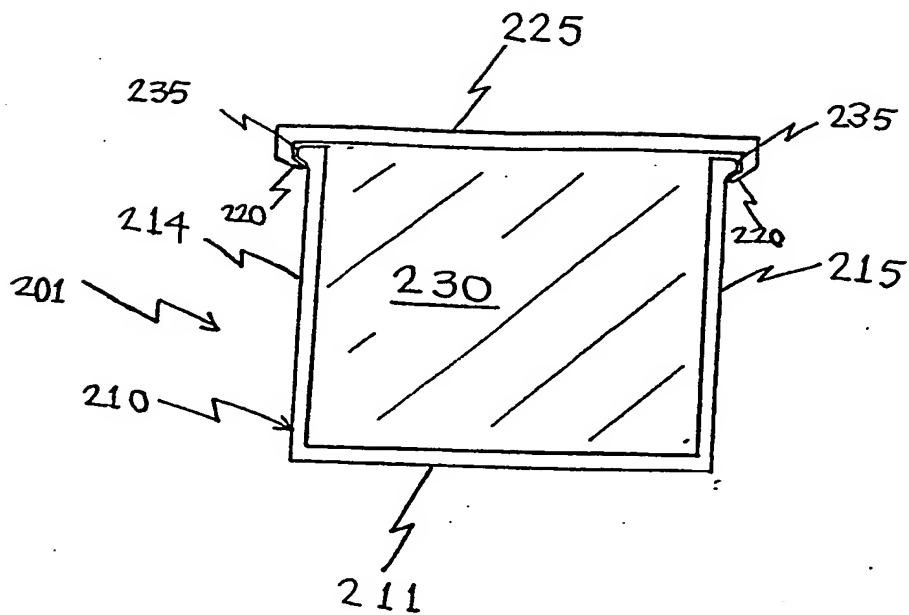


FIG 6

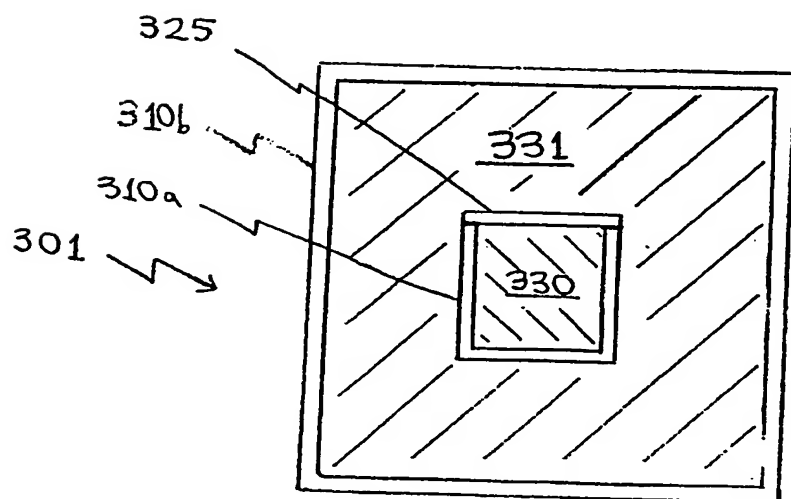


FIG 7